

REMARKS

The applicants have studied the Office Action dated June 23, 2003, and have made amendments to the claims. By virtue of this amendment, claims 1-13 and 89-90 are pending and claims 1 and 5 have been amended. It is respectfully submitted that the application, as amended, is in condition for allowance.

Claim 5 was objected to because in line 1, after the word "wherein" there appears to be a word omitted, such as "the" or "a." Claim 5 has been amended to correct the informality. It is respectfully submitted that the objection should now be withdrawn.

Claims 1-3, 6-11, and 89-90 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,165,407 to Wilson et al. This rejection is respectfully traversed.

Embodiments of the present invention are directed to a sensor with notches cut in the substrate to form a necked down region in the substrate to allow insertion into the skin of a user using a slotted needle. The notches cut in the substrate do not effect the workings of the sensor itself and specifically designed to avoid exposing the electrodes of the sensor. Claim 1 (and thus dependent claims 2-3, 6-11, and 89-90) has been amended to more specifically recite: "a substrate with notches cut in the substrate to form a necked down region in the substrate ... wherein the notches cut in the substrate do not expose the at least one sensor electrode" (emphasis added). The Wilson et al. reference does not disclose, teach, or suggest a substrate with notches cut in the substrate to form a necked down region in the substrate that does not expose at least one sensor electrode.

The Wilson et al. reference describes a sensor where a neck down region is formed to expose the sensor electrode. Specifically, the Wilson et al. reference recites: "The section 10 includes a central platinum-iridium wire 12 (0.18 mm o.d.) and a coating of insulative Teflon 14 (0.035 mm thickness) therearound. The central wire 12 forms the indicating electrode from the sensor. A cavity 16 (1-3 mm in length) is formed in the wire 10 as shown in FIG. 1. This is

achieved by first putting a circular cut on the Teflon coating with a paper cutter and then pulling the Teflon out to create a cavity of about 1 millimeter in length, exposing a corresponding section of the wire 12” (see col. 4, line 66 – col. 5, line 7)(emphasis added). The reason the Wilson et al. reference uses a cavity 16 is to expose the sensor electrode is for the very function of the sensor itself. Without exposing the sensor electrode in the Wilson et al. reference sensor, the sensor electrode would not have contact with the environment and thus not be able to function. Cavity 16 of the Wilson et al. reference sole purpose is to expose the sensor electrode, which is does not serve the same function as the notches cut in the substrate of the present invention. Nowhere in the Wilson et al. reference describes a substrate with notches cut in the substrate to form a necked down region in the substrate that does not expose at least one sensor electrode.

Therefore, it is respectfully submitted that the rejection of claims 1-3, 6-11, and 89-90 under 35 U.S.C. § 102(b) should be withdrawn.

Claims 4 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,165,407 to Wilson et al. in view of U.S. Patent No. 5,390,671 to Lord et al. This rejection is respectfully traversed.

Claims 4 and 5 depend from independent claim 1. Claim 1 has been patentably distinguished over Wilson et al. reference, as discussed above. Accordingly, claims 4 and 5 are also distinguished over the Wilson et al. reference. The Lord et al. reference does not make up the deficiencies of the Wilson et al. reference. In other words, the Lord et al. reference does not disclose, teach, or suggest “a substrate with notches cut in the substrate to form a necked down region in the substrate ... wherein the notches cut in the substrate do not expose the at least one sensor electrode” (emphasis added) as recited in claim 1. The Lord et al. reference was cited solely for the proposition of teaching the use of a slotted needle. Therefore, it is respectfully submitted that the rejection of claims 4 and 5 under 35 U.S.C. § 103(a) should be withdrawn.

Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,165,407 to Wilson et al. in view of U.S. Patent No. 6,256,937 to Schulman et al. This rejection is respectfully traversed.

Claims 12 and 13 and their base claims also depend from independent claim 1. Claim 1 has been patentably distinguished over Wilson et al. reference, as discussed above. Accordingly, claims 12 and 13 are also distinguished over the Wilson et al. reference. The Schulman et al. reference does not make up the deficiencies of the Wilson et al. reference. In other words, the Schulman et al. reference does not disclose, teach, or suggest “a substrate with notches cut in the substrate to form a necked down region in the substrate ... wherein the notches cut in the substrate do not expose the at least one sensor electrode” (emphasis added) as recited in claim 1. The Schulman et al. reference was cited solely for the proposition of teaching having electrodes on multiple surfaces. Therefore, it is respectfully submitted that the rejection of claims 12 and 13 under 35 U.S.C. § 103(a) should be withdrawn.

Therefore, in light of the above remarks, it is respectfully submitted that claims 1-13, 89, and 90 are in condition for allowance.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Northridge, California, telephone number (818) 576-4110, to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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